

2000 Resource Assessment of Selected Coal Beds and Zones in the Northern and Central Appalachian Basin Coal Regions

By Northern and Central Appalachian Basin Coal Regions Assessment Team

U.S. GEOLOGICAL SURVEY PROFESSIONAL PAPER 1625-C

SUMMARY

The U.S. Geological Survey (USGS), in partnership with the State geological surveys of Pennsylvania, West Virginia, Ohio, Maryland, Kentucky, and Virginia, digitally assessed six top-producing Pennsylvanian coal beds and coal zones in the northern and central Appalachian Basin coal regions. The six coal beds and zones—the Pittsburgh coal bed, Upper Freeport coal bed, Lower Kittanning coal bed, Fire Clay coal zone, Pond Creek coal zone, and the Pocahontas No. 3 coal bed—produce over 15 percent of the Nation's coal. Total original resources were calculated for five of the coal beds and zones—the Pittsburgh, Upper Freeport, Fire Clay, Pond Creek, and Pocahontas No. 3—and are estimated at about 93 billion short tons, of which about 66 billion short tons remain. Much of the remaining coal in all five coal beds and zones is thinner (<3.5 ft), deeper (>1,000 ft), and higher in ash and sulfur than the coal that has been mined; however, economic resources are still available and mining in each coal bed and coal zone will continue throughout this decade and into the next, given current market conditions. The assessments were carried out by a group of multidisciplinary scientists, technicians, and computer specialists from 1995 to 2000 as a part of the U.S. Geological Survey's National Coal Resource Assessment project.

In addition to chapters on the assessed coal beds and coal zones, this CD-ROM includes (1) a report on the geology and mining history of the northern and central Appalachian Basin coal regions, (2) a report summarizing other selected coal zones in the central Appalachian coal region (No. 5 Block, Stockton and Coalburg, Winifrede/Hazard, Williamson/Amburgy, Campbell Creek/Upper Elkhorn No. 3, and Upper Elkhorn Nos. 1 and 2/Powellton) that were not assessed in the current USGS assessment, and (3) a report on USGS coal availability and recoverability studies in the northern and central Appalachian Basin coal regions.

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By Leslie F. Ruppert and Charles L. Rice

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By Susan J. Tewalt, Leslie F. Ruppert, Linda J. Bragg, Richard W. Carlton, David K. Brezinski, Rachel N. Wallack, and David T. Butler

Chapter D—A Digital Resource Model of the Middle Pennsylvanian Upper Freeport Coal Bed, Allegheny Group, Northern Appalachian Basin Coal Region

By Leslie F. Ruppert, Susan J. Tewalt, Rachel N. Wallack, Linda J. Bragg, David K. Brezinski, Richard W. Carlton, David T. Butler, and Fred J. Calef, III

Chapter E—Geology and Geochemistry of the Middle Pennsylvanian Lower Kittanning Coal Bed, Allegheny Group, Northern Appalachian Basin Coal Region

By Robert C. Milici, Philip A. Freeman, Richard W. Carlton, Linda J. Bragg, David T. Butler, and Susan J. Tewalt

Chapter F—A Digital Resource Model of the Middle Pennsylvanian Fire Clay Coal Zone, Pottsville Group, Central Appalachian Basin Coal Region

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Chapter G—A Digital Resource Model of the Middle Pennsylvanian Pond Creek Coal Zone, Pottsville Group, Central Appalachian Basin Coal Region

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By M. Devereux Carter, Timothy J. Rohrbacher, Dale D. Teeters, David C. Scott, Lee M. Osmonson, Gerald A. Weisenfluh, Edward I. Loud, Roy S. Sites, Allan G. Axon, Mark E. Wolfe, and Leonard J. Lentz

DISC 2:

County-based ArcView Shape (.SHP) files of the resources, geology, and geochemistry used in the 2000 resource assessment of selected coal beds and zones in the northern and central Appalachian Basin coal regions